AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) A current monitoring and interrupting circuit, comprising:

an electrically conductive line carrying a DC current;

a sensor that outputs a voltage level indicative of a magnitude of the DC current;

a comparator that compares the voltage level to a reference potential and generates a circuit indicator signal; and

a logic-based current interrupter that ~~controls the current in the line~~ generates a second signal in response to the circuit indicator signal;[[.]]

a current switch that selectively prevents the flow of current in the electrically conductive line in response to the second signal.

2. (cancelled).

3. (original) The circuit of claim 2, wherein the current switch includes a MOSFET.

4. (original) The circuit of claim 1, further including a fuse disposed in the electrically conductive line.

5. (original) The circuit of claim 1, wherein the electrically conductive line is part of an electrical bus energized to at least 60 VDC.

6. (original) The circuit of claim 1, wherein the electrically conductive line is part of an electrical bus energized to at least 200 VDC.

7. (original) The circuit of claim 1, wherein the electrically conductive line is part of an electrical bus energized to at least 300 VDC.

8. (original) The circuit of claim 1, wherein the electrically conductive line is part of a vehicular electrical bus.

9. (original) The circuit of claim 1, wherein the sensor includes a Hall effect device.

10. (original) The circuit of claim 1, wherein the logic-based current interrupter includes a boolean logic device.

11. (original) The circuit of claim 10, wherein the boolean logic device includes a flip flop.

12. (original) The circuit of claim 1, further including a reset circuit.

13. (original) The circuit of claim 1, further including an indicator that signals whether the current is flowing in the electrically conductive line.

14. (currently amended) A method of monitoring and interrupting DC current flowing in an electrically conductive line, comprising:

sensing the DC current flowing in the electrically conductive line;

generating a voltage level indicative of a magnitude of the DC current;

comparing the voltage level to a reference voltage and generating a circuit indicator signal; and

using a logic-based device to ~~cause an interruption~~ prevent the flow of the DC current flowing in the electrically conductive line if the circuit indicator signal is indicative of a condition where the voltage level is higher than the reference voltage.

15. (original) The method of claim 14, wherein the logic-based device includes a flip flop that controls a current switch.

16. (original) The method of claim 15, wherein the current switch includes a MOSFET.

17. (original) The method of claim 14, further including resetting the logic-based device to restore the current flowing in the electrically conductive line.

18. (original) The method of claim 17, wherein the step of resetting is performed automatically.

19. (original) The method of claim 14, further including generating an indicator signal that conveys whether the current is flowing in the electrically conductive line.

20. (cancelled).

21. (Previously presented) A circuit breaker for interrupting a flow of DC current in an electrically conductive line, comprising:

a sensor that outputs a voltage level indicative of a magnitude of the DC current;

a comparator that compares the voltage level to a reference potential and generates a circuit indicator signal;

a logic device that receives the circuit indicator signal and generates a current interrupt signal when the circuit indicator signal corresponds to a condition where the voltage level is greater than the reference potential; and

a current switch that selectively prevents the flow of current in the electrically conductive line in response to the current interrupt signal.

22. (original) The circuit breaker of claim 21, wherein the sensor includes a Hall effect current transducer.

23. (original) The circuit breaker of claim 21, wherein the logic device includes a flip flop.

24. (original) The circuit breaker of claim 21, wherein the current switch includes a MOSFET.

RECORD OF PERSONAL INTERVIEW UNDER 37 C.F.R. § 1.133(b)

A telephone interview was conducted on August 02, 2007 between representatives of the Applicant, Biju Chandran and Elizabeth Burke, and Examiner Dharti Patel to discuss the Office Action mailed May 30, 2007 ("the Office Action"). During the interview, the following items were discussed: 35 U.S.C § 103(a) rejection of claim 21 as being unpatentable over U.S.P.N. 7,010,704 issued to Yang et al. ("Yang") in view of U.S. pre-patent publication 2003/0202304 issued to Canova et al. ("Canova"). A summary of the discussions are described herein. The Applicant and Applicant's representatives thank the Examiner for taking the time to discuss the Office Action.

Applicant's representatives expressed the opinion that Yang in combination with Canova, as used to reject claim 21, does not meet the requirements of a 103(a) rejection since neither Yang nor Canova teach or suggest all the elements of claim 21. Particularly, neither Yang nor Canova teach that the circuit breaker prevents the flow of current in the circuit when an over current is detected. Applicant's representatives also pointed out that if the Examiner interprets Canova to teach preventing the flow of current in the circuit, then the combination of Yang and Canova would destroy the operation of Yang, and therefore, not proper.

The Examiner concurred that if the characterization of Yang and Canova by the Applicant's representatives were indeed accurate, then combining Yang and Canova would destroy the invention of Yang. However, since the Examiner was not well conversant with the invention of Yang and Canova at that moment, the Examiner could not express an opinion as to the accuracy of Applicant's representatives characterizations of Yang and Canova. However, the Examiner agreed that if the

description of the Applicant's representative were accurate, then new prior art would be required to reject claim 21.

Applicant's representatives enquired whether amending independent claim 1 to add the limitation of claim 2 (current switch) and additional language from claim 21, to indicate that the current switch prevents the flow of current in the circuit in response to a signal, would avoid a similar 35 U.S.C 103(a) rejection (as applied to claim 21) to claim 1. The Examiner indicted that a 35 U.S.C 103(a) rejection with Yang and Canova would probably not be applied against such an amended claim, but a new search would be carried out to determine appropriate prior art.

The responses to the rejections set forth in the following remarks substantially conform to the arguments made during the telephone conference.